

Claims

1. A filling and packaging machine adapted to continuously form packaging bags from a film while packaging a material in the bags by carrying out the steps of drawing out and guiding a film from a raw film roll made of a wound film; sending this film to a film folding mechanism adapted to fold back the film in two in the widthwise direction; superposing the two parts of the folded film on each other, vertically sealing the film by a pair of vertically sealing rolls provided in an opposed manner in a vertically sealing mechanism and forming the film cylindrically at this vertically sealed portion; laterally sealing the cylindrically formed film by a pair of laterally sealing rolls provided in a laterally sealing bag at this laterally sealed portion; filling a material into the film formed to a bottomed cylinder at the bottom portion; and laterally sealing a bag mouth portion of the film as the film is further fed, by the lateral sealing rolls of the laterally sealing mechanism to form a packaged bag and thereby carrying out a continuous packaging operation, characterized in that the film folding mechanism is provided with a inner surface guide member, which is adapted to guide the film in the widthwise direction thereof, on the side of inner surfaces of the twofold film, left and right preheating block members which are disposed on the side of outer surfaces of the film via clearances of a predetermined width left therebetween so that

the preheating block members extend in the widthwise direction of the film, and which have inclined receiving surfaces so that the clearances between the film and preheating block members at an upstream side with respect to the film transfer direction become larger than those between the film and preheating block members at a downstream side with respect to the same direction, and heaters provided in the interior of the preheating block members.

2. A filling and packaging machine according to Claim 1, wherein the two preheating block members are provided so that the fixing angle thereof can be finely regulated.

3. A filling and packaging machine according to Claim 1, wherein the positions in which the two preheating block members are fixed can be vertically regulated.

4. A filling and packaging machine according to Claim 1, wherein the distance between the two preheating block members can be regulated.

5. A filling and packaging machine adapted to continuously form packaging bags from a film and continuously packaging a material in the bags by carrying out the steps of drawing out and guiding a film from a raw film roll made of a wound film; sending the film to a film folding mechanism adapted to fold back the film in two in the widthwise direction; superposing the two parts of the folded film on each other, vertically sealing the film by a pair of vertically sealing rolls provided

in an opposed manner in a vertically sealing mechanism and forming the film cylindrically at this vertically sealed portion; laterally sealing the cylindrically formed film by a pair of laterally sealing rolls provided in a laterally sealing mechanism, and forming a bottom portion of a packaging bag at the laterally sealed portion; filling a material into the film formed to a bottomed cylinder at the bottom portion; and laterally sealing a bag mouth portion of the film as the film is further fed, by the laterally sealing rolls of the laterally sealing mechanism to form a packaged bag and thereby carrying out a continuous packaging operation, characterized in that the film folding mechanism is provided with an inner surface guide member, which is adapted to guide the film in the widthwise direction thereof, on the side of inner surfaces of the twofold film, left and right preheating block members which are disposed on the side of outer surfaces of the film via clearances of a predetermined width left therebetween so that the preheating block members extend in the widthwise direction of the film, and which have arcuate receiving surfaces so that the clearances between the film and preheating block members at an upstream side with respect to the film transfer direction become larger than those between the film and preheating block members at a downstream side with respect to the same direction, and heaters provided in the interior of the preheating block members.

6. A filling and packaging machine according to Claim 5, wherein the radius of curvature of the arcuate receiving surfaces provided on the two preheating block members is arbitrarily set.

7. A filling and packaging machine according to Claim 5, wherein the two preheating block members are provided so that the positions in which the preheating block members are fixed can be vertically regulated.

8. A filling and packaging machine according to Claim 5, wherein the two preheating block members are provided so that the distance therebetween can be varied.